

28. *Extensive Caries of the Left Tibia and of the Upper Third of the Fibula; Dislocation of both Bones Backwards; Excision of Knee-joint; Recovery.*—Mr. G. M. JONES, of Jersey, records (*Med. Times and Gaz.*, June 21) the following remarkable case:—

"Elizabeth Noel, aged 9, was admitted into the Jersey Hospital, August 16th, 1855; but little of her previous history can be collected, as an uncle (the only relation she has) left this island the following day. It would, however, appear that for nearly two years she had been unable to walk without crutches; that poultices of various kinds, but mostly composed of herbs, were applied to her knee and leg at some small village on the coast of Brittany, where she had resided for some years, and that, in consequence of her helplessness and increasing bad health, she was sent to this, her native place, for parochial relief, but more especially to have the affected limb removed. The child's appearance indicated a strumous diathesis; there was considerable emaciation; her appetite was very indifferent; pulse 106; nights sleepless; and the glands of the neck were enlarged. The affected leg and knee presented an extraordinary appearance. The tibia was dislocated backwards, its head being thrust completely into the ham; the popliteal vessels were thus rendered easily perceptible; the patella, which rested in the interspace between the condyles of the femur and head of the tibia, was so atrophied as to be scarcely distinguishable; the head of the tibia was much expanded, also the whole shaft of the bone generally, and the integuments were in a state of *gonflement*; an open suppurating surface existed along its entire length, the bone being exposed in many parts, and distinguishable by the probe everywhere; several fistulous apertures existed laterally and posteriorly, three also along the fibula on its outer aspect; the probe detected bone in all of them. There existed an immense amount of lateral motion in the dislocated joint; the muscles of the thigh were much atrophied; the motions of the ankle-joint were natural. Four days after the child's admission, the following operation was performed while the patient was under the influence of chloroform.

"An incision beginning just below the patella was carried downwards along the almost entire length of the tibia. It was made in rather a zigzag manner, in order to include as many of the fistulous openings as possible; the integuments were then dissected on either side of the bones, so as to expose the diseased parts thoroughly. In many places the tibia was found divested of its periosteum, in others it was thickened and rough; while at its upper and lower thirds it was so softened as to necessitate scooping out to a considerable depth before healthy cancellous structure was met with; the gouge and chisel had, therefore, to be freely employed throughout.¹ After removing as much diseased bone as could be seen, the next step was excision of the knee-joint. This was performed, first by making a horseshoe flap, and then proceeding in the manner generally followed, though the extremely disorganized state of the joint rendered the removal of those parts which compose it much more difficult than is ordinarily the case.² A large portion of the joint-ends had to be removed; likewise the head of the fibula, and a large sequestrum from the upper third of this bone. The patella, after gouging its under part, was left. No vessel required ligature, though the hemorrhage was at times rather considerable.

¹ For some years I have not operated on joints or bones without having near me several of the tools employed by wood-carvers, and can highly recommend their utility in some cases. Those who have watched carvers at their work must have observed how admirably adapted are some of their tools for taking away some portions without injuring those they are anxious to preserve; so their occasional use in surgical operations prevents the unnecessary dividing of soft parts, and are often of far greater utility than those made for surgical purposes.

² This difficulty would have been greatly increased had I not been in possession of the valuable saw given me by the inventor, my esteemed friend, Mr. Butcher, of Dublin, to whose unwearied exertions in the cause of conservative surgery—which cause his great talents so eminently qualify him to advance, I am happy to have this opportunity of bearing my humble testimony.

"*State of the Joint.*—On opening the joint, extensive pulpy degeneration of the synovial membrane was met with; the cartilages covering the ends of the bones presented unmistakable traces of former disease; the semilunar cartilages were partially absorbed, the remaining portions disorganized; the anterior crucial ligament gone, the posterior one much absorbed, and consequently thinner than usual; the tissues generally sound. The joint was tolerably healthy.

"After the operation the leg was placed in a suitable box, and kept steady by means of pads, etc. Water-dressing applied; neither sutures nor adhesive straps were employed.

"It would be a work of supererogation, and tend to no practical purpose, to give anything like a daily account of the progress of this case from the time of the operation to the period of cure; suffice it to say, that everything progressed most favourably, and never for a moment did a single symptom occur to cause the slightest anxiety. At the expiration of ten days there was an evident melioration in the little patient's health; five weeks after the operation she was able to raise the whole limb; and three weeks after this, went about the wards on crutches; scarcely three months elapsed when she moved about without any appliances to the knee. The affection of the tibia and fibula did not keep pace with that of the joint; the healing process was much more gradual, owing to occasional sequestra coming away, which naturally kept up some irritation and discharge. For some time past the child has been in perfect health, strong and stout, and can walk quickly about with her little companions. Water-dressings, with the exception of the occasional use of the dilute nitric acid lotion, were the only local applications employed throughout. The most nutritious food, and an abundant quantity of wine and malt liquor was taken; also quinine, syrup of iodide of iron, and cod-liver oil. The child, as I have already stated, walks well. Cicatrices have replaced running sores; and the limb has almost resumed its natural appearance."

29. *Incisions into Joints.*—Mr. GAY, in a paper read before the Medical Society of London (Oct. 18, 1856,) remarked, that three years ago he brought before the Profession, through the medium of this Society, a method of treating certain forms of articular disease by free incisions into the affected cavities; but that since that period his experience of this treatment had led him somewhat to modify his views, and had enabled him with more distinctness to define the particular forms and stages of disease for which it is more especially adapted. His object in making incisions was not merely to evacuate matter, as in the case of an ordinary abscess, and as this proceeding has been adopted and recommended by others; but as well, and even chiefly, for the purposes of allowing the more ready escape of cartilaginous or bony *débris*—often a cause of destructive irritation to a joint—and of setting up reparative action by making a closed or partially closed and diseased sac a part of a large and externally communicated wound. The results of his experience, as that of many of his professional brethren who had adopted his views, had been still more to convince him that free incisions were of the greatest value in those forms of disease to which they were appropriate, inasmuch as they bring the diseased processes to an equally speedy determination as after resection of the joint, and have the greater merit of leaving the flesh less mutilated, and the joint often almost as useful as before. Moreover, the incisions are often comparatively harmless, and, in case of failure, do not lessen the chance of restoring the limb that resection, or other measures of a graver nature, might afford. Mr. Gay then narrated a series of cases. The first, that of a lady, aged 43, who had suffered for three years from all the symptoms of disease of the cartilage and bony structures of the knee-joint, and had come to have the limb amputated. On making an incision into the joint, which Mr. Gay did, with the assistance of Mr. Stephens, over the seat of the principal pain, a small quantity of sero-purulent fluid trickled out with the blood. On examining the interior of the joint carefully, the cartilage was found to be entire, but slightly uneven, leading to the conclusion that the affection commenced in the synovial capsule, and had not seriously implicated other structures. The intense pain from which this